was also noticed. Female moths reared from brinjal, tomato and *Solanum nigrum* laid on an average 152, 113 and 38 eggs. All the eggs were equally viable and hatched after an incubation period of 6 days. The total life cycle of *Leucinodes orbonalis* Guen. on the respective hosts was 27, 28 and 29 days. During the course of the study the average minimum and maximum laboratory temperatures were 79·5°F and 82·0°F and the relative humidity was 89%.

Tomato and *Solanum nigrum* are thus suitable alternate hosts of the brinjal shoot and fruit borer *Leucinodes orbonalis* Guen. Though the growth of the borer on *Solanum nigrum* is poor. However, it completes its life cycle on this host also. Moths from *Solanum nigrum* which were smaller in size with reduced wing spread laid far less eggs in comparision to the moths from the two other hosts. This shows that the size and vigour of the moths are correlated with their fecundity.

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26. CHAFER BEETLE, *ADORETUS* SP. (COLEOPTERA: SCARABAEIDAE) A NEW PEST ON GUAVA IN INDIA

Guava (*Psidium guajava* I.) is an important fruit crop in India, the State of Uttar Pradesh being the largest grower with approximately 9,840 hectares under it and accounting roughly for over one-third of the entire guava crop of the country (Hayes 1961). Adult Chafer beetles *Adoretus* sp. (Coleoptera: Scarabaeidae) were recorded feeding on its leaves in the Himalayan foothills in Uttar Pradesh. The infestation was mainly during the monsoon season and thereafter and the damage was fairly serious. We presume that this is the first record of the pest on guava in India.

The adult *Adoretus* sp. is about 11 mm. long and light greenish-brown in colour. They are strictly nocturnal and usually solitary. They feed on the foliage, causing in the beginning small irregular holes, usually starting from the middle of the infested lamina and extending outwards towards the margin. A large number of irregular holes 2 to 4 mm. in diameter is thus formed on the guava leaves. Depending upon the degree of damage to the foliage, the pest reduces the yield, and in serious cases the number of fruits is substantially lowered.

Control Measures:

Spraying with 0·02 per cent endrin at the rate of 5 litres per mature tree, in the early hours of the night, effectively controls the pest. This application is recommended particularly for trees which are not bearing. For trees bearing fruits, spraying 0·05 per cent DDVP, i.e. 1 ml. of Nuvan 100, mixed in 2 litres of water at the same rate is recommended.

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27. PLIETESIAL SPECIES OF STROBILANTHINAE (ACANTHACEAE) IN THE WESTERN GHATS (INDIA)

Biennial or perennial plant species flowering or fruiting only once in their life-cycle are usually termed 'Monocarpic', as for instance, Agave & Yucca. If such monocarpic species form compact communities in a homogenous habitat with a synchronous and mass flowering followed by fruiting and simultaneous termination of life-cycle on a mass scale such species are usually termed as 'Plietesials'.

Various species of bamboos are well known for their gregarious flowering only once at the end of their life-cycle ranging from 40 years or more. A similar plietesial habit characterises certain members of the family Acanthaceae. The term 'plantae plietesiae' was coined by Bremekamp (1944) specially to describe certain species of 'Strobilanthinae' of the Acanthaceae. Clarifying the term, he writes of these